



INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Docket: 4830-45053	Ser: 08/649,419		
				Applicant: Geoffrey B. Rhoads			
				Filed: 5/16/96		Group: 2317	
U.S. PATENT DOCUMENTS							
Init.*		Number	Date	Name	Class	Sub	Filed
		5,568,570	10/22/96	Rabbani			9/30/94
		5,541,741	7/20/96	Suzuki			9/25/92
		5,532,920	7/2/96	Hartrick et al.			12/28/94
		5,530,759	1/25/96	Braudaway et al.			11/30/93
		5,524,936	6/11/96	Kunt et al.			5/26/93
		5,515,081	5/7/96	Vasilik			11/30/93
		5,499,294	3/12/96	Friedman			5/24/95
		5,488,664	1/30/96	Shamir			4/22/94
		5,479,168	12/26/95	Johnson et al.			
		5,473,631	12/5/95	Moses			
		5,469,506	11/21/95	Berson			
		5,450,490	9/12/95	Jensen et al.			
		5,446,273	8/29/95	Leslie			
		5,432,870	7/11/95	Schwartz			
		5,428,607	6/27/95	Hiller et al.			
		5,422,995	6/6/95	Aoki et al.			
		5,422,963	6/6/95	Chen et al.			
		5,408,542	4/18/95	Callahan			
		5,404,377	4/4/95	Moses			
		5,398,283	3/14/95	Virga			
		5,396,559	3/7/95	McGrew			
		5,394,274	2/28/95	Kahn			
		5,379,345	1/3/95	Greenberg			
		5,351,302	9/27/94	Leighton et al.			
		5,337,362	8/9/94	Gormish et al.			
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Init.*	Number	Date	Name	Class	Sub	Filed	
	5,325,167	6/28/94	Melen				
	5,319,735	6/7/94	Preuss et al.				
	5,319,724	6/7/94	Blonstein et al.				
	5,319,453	6/7/94	Copriviza				
	5,315,098	5/24/94	Tow				
	5,305,400	4/19/94	Butera				
	5,299,019	3/29/94	Pack et al.				
	5,295,203	3/15/94	Krause et al.				
	5,293,399	3/8/94	Hefti				
	5,280,537	1/18/94	Sugiyama et al.				
	5,267,334	11/30/93	Normille et al.				
	5,259,025	11/2/93	Monroe				
	5,257,199	10/26/93	Funada et al.				
	5,253,078	10/12/93	Balkanski et al.				
	5,245,329	9/14/93	Gokcebay				
	5,243,423	9/7/93	DeJean et al.				
	5,228,056	7/13/93	Schilling				
	5,213,337	5/25/93	Sherman				
	5,212,551	5/18/93	Conanan				
	5,200,822	4/6/93	Bronfin et al.				
	5,199,081	3/30/93	Saito et al.				
	5,185,736	2/9/93	Tyrrell et al.				
	5,181,786	1/26/93	Huijink				
	5,166,676	11/24/92	Milheiser				
	5,161,210	11/3/92	Druyvesteyn et al.				
	5,150,409	9/22/92	Elsner				
	5,148,498	9/15/92	Resnikoff et al.				
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Init.*	Number	Date	Name	Class	Sub	Filed	
	5,144,660	9/1/92	Rose				
	5,113,437	5/12/92	Best				
	5,095,196	3/10/92	Miyata				
	5,079,648	1/7/92	Maufe				
	5,077,795	12/31/91	Rourke et al.				
	5,073,899	12/17/91	Collier et al.				
	5,063,446	11/5/91	Gibson				
	5,036,513	7/30/91	Greenblatt				
	5,027,401	6/25/91	Soltesz				
	5,010,405	4/23/91	Schreiber et al.				
	4,996,530	7/26/91	Hilton				
	4,993,068	2/12/91	Piosenka				
	4,979,210	12/18/90	Nagata et al.				
	4,972,476	11/20/90	Nathans				
	4,972,471	11/20/90	Gross et al.				
	4,969,041	11/6/90	O'Grady et al.				
	4,967,273	10/30/90	Greenberg				
	4,965,827	10/23/90	McDonald				
	4,963,998	10/16/90	Maufe				
	4,944,036	7/24/90	Hyatt				
	4,943,976	7/24/90	Ishigaki				
	4,943,973	7/24/90	Werner				
	4,941,150	7/10/90	Iwasaki				
	4,939,615	7/3/90	Adelson				
	4,921,278	5/1/90	Shiang et al.				
	4,908,873	3/13/90	Philibert et al.				
	4,908,836	3/13/90	Rushforth et al.				
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<p style="text-align: center;">1997 INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p>			Docket: 4830-45053		Ser: 08/649,419		
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U.S. PATENT DOCUMENTS							
Init.*	Number	Date	Name	Class	Sub	Filed	
	4,903,301	2/20/90	Kondo et al.				
	4,884,139	11/28/89	Pommier				
	4,879,747	11/7/89	Leighton et al.				
	4,876,617	10/24/89	Best et al.				
	4,874,936	10/17/89	Chandler et al.				
	4,866,771	9/12/89	Bain				
	4,864,618	9/5/89	Wright et al.				
	4,835,517	5/30/89	van der Gracht et al.				
	4,820,912	4/11/89	Samyn				
	4,811,408	3/7/89	Goldman				
	4,811,357	3/7/89	Betts et al.				
	4,807,031	2/21/89	Broughton et al.				
	4,805,020	2/14/89	Greenberg				
	4,776,013	10/4/88	Kafri et al.				
	4,775,901	10/4/88	Nakano				
	4,765,656	8/23/88	Becker et al.				
	4,750,173	6/7/88	Blüthgen				
	4,739,377	4/19/88	Allen				
	4,718,106	1/5/88	Weinblatt				
	4,712,103	12/8/87	Gotanda				
	4,703,476	10/27/87	Howard				
	4,682,794	7/28/87	Margolin				
	4,677,435	6/30/87	Cause D'Aggraves et al.				
	4,675,746	6/23/87	Tetrick et al.				
	4,672,605	6/9/87	Hustig et al.				
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Init.*	Number	Date	Name	Class	Sub	Filed	
	4,665,431	5/12/87	Cooper				
	4,663,518	5/5/87	Borror et al.				
	4,660,221	4/21/87	Slugos				
	4,654,867	3/31/87	Labedz et al.				
	4,637,051	1/13/87	Clark				
	4,595,950	6/17/86	Löfberg				
	4,590,366	5/20/86	Rothfjell				
	4,547,804	10/15/85	Greenberg				
	4,553,261	11/10/85	Froessl				
	4,532,508	7/30/85	Ruell				
	4,528,588	7/9/85	Löfberg				
	4,476,468	10/9/84	Goldman				
	4,425,642	1/10/84	Moses et al.				
	4,423,415	12/27/83	Goldman				
	4,395,600	7/26/83	Lundy et al.				
	4,389,671	6/21/83	Posner et al.				
	4,379,947	4/12/83	Warner				
	4,313,197	1/26/82	Maxemchuk				
	4,252,995	2/24/81	Schmidt et al.				
	4,238,849	12/9/80	Gassmann				
	4,231,113	10/28/80	Blasbalg				
	4,230,990	10/28/80	Lert, Jr. et al.				
	4,225,967	9/30/80	Miwa et al.				
	3,984,624	10/5/76	Waggener				
	3,971,917	7/27/76	Maddox et al.				
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U.S. PATENT DOCUMENTS							
Init.*	Number	Date	Name	Class	Sub	Filed	
	3,922,074	11/25/75	Ikegami et al.				
	3,914,877	10/28/75	Hines				
	3,838,444	9/24/74	Loughlin et al.				
	3,809,806	5/7/74	Walker et al.				
	3,805,238	4/16/74	Rothfjell				
	3,703,628	11/21/72	Philipson, Jr.				
	3,655,162	5/23/72	Yamamoto et al.				
	3,569,619	3/9/71	Simjian				
FOREIGN PATENT DOCUMENTS							
	Number	Date	Country	Class	Sub		
	05/242217	9/21/93	Japan				
	4-248771	9/4/92	Japan				
	8-30759	2/2/96	Japan				
	2,204,984	11/23/88	U.K.				
	2,196,167	4/20/88	U.K.				
	2,063,018A	5/28/81	U.K.				
	2,067,871	7/30/81	U.K.				
	705 025 A2	4/3/96	EPC				
	650 146 A1	4/26/95	EPC				
	649 074 A1	4/19/95	EPC				
	629 972	12/21/94	EPC				
	605 208 A2	7/6/94	EPC				
	581 317	2/2/94	EPC				
	551 016 A1	2/2/94	EPC				
	493 091	7/1/92	EPC				
	441 702	8/14/91	EPC				
	411 232	2/6/91	EPC				
	372 601	6/13/90	EPC				
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		Number	Date	Country	Class	Sub
		058 482	8/25/82	EPC		
		3806411	9/7/89	Germany		
		WO89/08915	9/21/89	PCT		
		WO95/10835	4/20/95	PCT (Japan)		
		WO95/20291	7/27/95	PCT		
		WO95/14289	5/26/95	PCT		
		WO96/27259	9/6/96	PCT		
		WO96/26494	8/29/96	PCT		
		WO93/25038	12/9/93	PCT		
OTHER DOCUMENTS						
		Komatsu et al., "A Proposal on Digital Watermark in Document Image Communication and Its Application to Realizing a Signature," <i>Electronics and Communications in Japan</i> , Part 1, Vol. 73, No. 5, 1990, pp. 22-33.				
		Schneier, "Digital Signatures, Cryptographic Algorithms Can Create Nonforgeable Signatures for Electronic Documents, Making Them Valid Legal Instruments" <i>BYTE</i> , November 1993, pp. 309-312.				
		Komatsu et al., "Authentication System Using Concealed Image in Telematics," <i>Memoirs of the School of Science & Engineering</i> , Waseda Univ., No. 52, 1988, pp. 45-60.				
		Machado, "Announcing Stego 1.0a2, The First Steganography Tool for the Macintosh," Internet reference, November 28, 1993, 3 pages.				
		Arachelian, "White Noise Storm," April 11, 1994, Internet reference, 13 pages.				
		Brown, "S-Tools for Windows, Version 1.00, © 1994 Andy Brown, What is Steganography," Internet reference, March 6, 1994, 6 pages.				
		shaggy@phantom.com, "Hide and Seek v. 4.0," Internet reference, April 10, 1994, 3 pages.				
		Wise, "The History of Copyright, Photographers' Rights Span Three Centuries," <i>PHOTO>Electronic Imaging</i> , Vol. 37, No. 6, 1994.				
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OTHER DOCUMENTS			
		Kassam, <u>Signal Detection in Non-Gaussian Noise</u> , Dowden & Culver, 1988, pp. 1-96.	
		Brassil et al., "Electronic Marking and Identification Techniques to Discourage Document Copying, <u>Proceedings of INFOCOM '94 Conference on Computer, IEEE Commun. Soc. Conference</u> , June 12-16, 1994, pp. 1278-1287.	
		Jain, "Image Coding Via a Nearest Neighbors Image Model," <u>IEEE Transactions on Communications</u> , Vol. COM-23, No. 3, March 1975, pp. 318-331.	
		Arthur, "Digital Fingerprints Protect Artwork," <u>New Scientist</u> , November 12, 1994, p. 24.	
		Matthews, "When Seeing is Not Believing," <u>New Scientist</u> , October 16, 1993, pp. 13-15.	
		Bender et al., "Techniques for Data Hiding," Massachusetts Institute of Technology, Media Laboratory, January 1995, 10 pages.	
		Walton, "Image Authentication for a Slippery New Age," <u>Dr. Dobb's Journal</u> , April 1995, pp. 18-26, 82-87.	
		Port, "Halting Highway Robbery on the Internet," <u>Business Week</u> , October 17, 1994, p. 212.	
		"Foiling Card Forgers With Magnetic 'Noise,'" <u>Wall Street Journal</u> , February 8, 1994.	
		Fitzgerald, "Invisible Digital Copyright ID," <u>Editor & Publisher</u> , June 25, 1994, p. 62.	
		van Schyndel et al., "A Digital Watermark," <u>IEEE International Conference on Image Processing</u> , November 13-16, 1994, pp. 86-90.	
		Matsui et al., "Video-Steganography: How to Secretly Embed a Signature in a Picture," <u>IMA Intellectual Property Project Proceedings</u> , January 1994, Vol. 1, Issue 1, pp. 187-205.	
		Tanaka et al., "Embedding Secret Information Into a Dithered Multi-Level Image," <u>Proc. IEEE Military Comm. Conf.</u> , Sept. 1990, pp. 216-220.	
		Tanaka et al., "New Integrated Coding Schemes for Computer-Aided Facsimile," <u>Proc. IEEE Int'l Conf. on Sys. Integration</u> , April 1990, pp. 275-281.	
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OTHER DOCUMENTS				
		Schreiber et al., "A Compatible High-Definition Television System Using the Noise-Margin Method of Hiding Enhancement Information," <u>SMPTE Journal</u> , December 1989, pp. 873-879.		
		Short, "Steps Toward Unmasking Secure Communications," <u>International Journal of Bifurcation and Chaos</u> , Vol. 4, No. 4, 1994, pp. 959-977.		
		Tanaka, "Embedding the Attribute Information Into a Dithered Image," <u>Systems and Computers in Japan</u> , Vol. 21, No. 7, 1990, pp. 43-50.		
		Nakamura et al., "A Unified Coding Method of Dithered Image and Text Data Using Micropatterns," <u>Electronics and Communications in Japan</u> , Part 1, Vol. 72, No. 4, 1989, pp. 50-56.		
		Simmons, "Subliminal Channels; Past and Present," <u>EIT</u> , Vol. 5, No. 4, July-August 1994, pp. 45-59.		
		Nakamura et al., "A Unified Coding Method of Image and Text Data Using Discrete Orthogonal Transform," <u>Systems and Computers in Japan</u> , Vol. 21, No. 3, 1990, pp. 87-92.		
		Tanaka et al., "A Visual Retrieval System with Private Information for Image Database," <u>Proceeding International Conference on DSP Applications and Technology</u> , October 1991, 415-421.		
		Sapwater et al., "Electronic Copyright Protection," <u>PHOTO>Electronic Imaging</u> , Vol. 37, No. 6, 1994, pp. 16-21.		
		JPEG Group's JPEG Software (release 4), <u>FTP.CSU.BERKELEY.EDU /PUB/CYPHERPUNKS/APPLICATIONS/ JSTEG/JPEG.ANNOUNCEMENT.GZ</u> , 6/7/93, 2 pages.		
		"Access Control and COperty Protection for Images, WorkPackage 8: Watermarking," June 30, 1995, 46 pages.		
		"Access Control and COperty Protection for Images, WorkPackage 3: Evaluation of Existing Systems," April 19, 1995, 68 pages.		
		Boneh, "Collusion-Secure Fingerprinting for Digital Data," Department of Computer Science, Princeton University, 1995, 31 pages.		
		Burgett et al., "A Novel Method for Copyright Labeling Digitized Image Data," requested by e-mail from author (unavailable/password protected on IGD WWW site); received 9/18/95, 12 pages.		
			DATE:	
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OTHER DOCUMENTS

		Friedman, "The Trustworthy Digital Camera: Restoring Credibility to the Photographic Image," <u>IEEE Transactions on Consumer Electronics</u> , Vol. 39, No. 4, November, 1993, pp. 905-910.
		"Cyphertech Systems: Introduces Digital Encoding Device to Prevent TV Piracy," <u>Hollywood Reporter</u> , October 20, 1993, p. 23.
		"NAB - Cyphertech Starts Anti-Piracy Broadcast Tests," <u>Newbytes</u> , NEW03230023, March 23, 1994.
		Humphrey, "Stamping Out Crime," <u>Hollywood Reporter</u> , January 26, 1994, p. S48.
		Koch et al., "Towards Robust and Hidden Image Copyright Labeling," <u>Proc. of 1995 IEEE Workshop on Nonlinear Signal and Image Processing</u> , June 20-22, 1995, 4 pages.
		"Copyright Protection for Digital Images, Digital Fingerprinting from FBI," Highwater FBI brochure, 1995, 4 pages.
		"High Water FBI Limited Presentation Image Copyright Protection Software," FBI Ltd brochure, July, 1995, 17 pages.
		Boland et al., "Watermarking Digital Images for Copyright Protection," Fifth International Conference on Image Processing and its Applications, Conference Date 4-6 July 1995, Conf. Publ. No. 410, p. 326-330.
		"Steganography," <u>Intellectual Property and the National Information Infrastructure The Report of the Working Group on Intellectual Property Rights</u> , September 1995, pp. 212-213.
		Caruso, "Digital Commerce, 2 plans for watermarks, which can bind proof of authorship to electronic works," <u>New York Times</u> , August 7, 1995, one page.
		"Holographic signatures for digital images," <u>The Seybold Report on Desktop Publishing</u> , August 1995, one page.
		Clarke, "Invisible Code Tags Electronic Images," <u>Electronic Engineering Times</u> , June 12, 1995, n. 852, p. 42.
		"The Copyright Can of Worms Opened Up By The New Electronic Media," <u>Computergram Internations</u> , pCGN07170006, July 17, 1995 and "The Copyright Can of Worms Opened Up By the New Electronic Media - 2," <u>Computergram Internations</u> , pCGN07210008, July 21, 1995, 3 pages total.
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			'Access Control and COperty Protection for Images, WorkPackage 1: Access Control and Copyright Protection for Images Need Evaluation," June, 1995, 21 pages.	
			'Access Control and COperty Protection for Images, Conditional Access and Copyright Protection Based on the Use of Trusted Third Parties," 1995, 43 pages.	
			Luc, "Analysis of Spread Spectrum System Parameters for Design of Hidden Transmission," <u>Radioengineering</u> , Vol. 4, No. 2, June 1995, pp. 26-29.	
			Macq, "Cryptology for Digital TV Broadcasting," <u>Proceedings of the IEEE</u> , Vol. 83, No. 6, June 1995, pp. 944-957.	
			Zhao et al., "Embedding Robust Labels into Images for Copyright Protection," <u>Proc. of the International Congress on Intellectual Property Rights for Specialized Information, Knowledge and New Technologies</u> (Vienna, Austria) August 21-25, 1995, 10 pages.	
			'Frequently Asked Questions About Digimarc Signature Technology, August 1, 1995, HTTP://WWW.DIGIMARC.COM , 9 pages.	
			Bender et al, "Techniques for Data Hiding," Draft Preprint, Private Correspondence, dated 10/30/95.	
			Johnson, "Steganography," December 10, 1995, 32 pages.	
			Aura, "Invisible Communication," Helsinki University of Technology, Digital Systems Laboratory, November 5, 1995, 13 pages.	
			Digimarc presentation at RSA Conference, approximately 1/17/96, 4 pages	
			Hecht, "Embedded Data Glyph Technology for Hardcopy Digital Documents," SPIE Vol 2171, 2/94, pp. 341-352.	
			Roberts, "Picture Coding Using Pseudorandom Noise," IRE Trans. on Information Theory, Vol. 8, No. 2, Feb., 1962, pp. 145-154.	
			Choudhury, et al, "Copyright Protection for Electronic Publishing over Computer Networks," <u>IEEE Network Magazine</u> , June 1994, 18 pages.	
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OTHER DOCUMENTS				
		Möller, et al., "Rechnergestützte Steganographie: Wie sie Funktioniert und warum folglich jede Reglementierung von Verschlüsselung unsinnig ist." <u>DuD. Datenschutz und Datensicherung</u> , 18/6 (1994) 318-326.		
		Pennebaker et al., <u>JPEG Still Image Data Compression Standard</u> , Chapter 3, "Aspects of the Human Visual System," pp. 23-27, 1993, Van Nostrand Reinhold, New York.		
		Castro et al., "Registration of Translated and Rotated Images Using Finite Fourier Transforms," <u>IEEE Transactions on Pattern Analysis and Machine Intelligence</u> , Vol. PAMI-9, No. 5, September 1987, pp. 700-703.		
		Weber et al., "Correlative Image Registration," <u>Seminars in Nuclear Medicine</u> , Vol XXIV, No. 4 (October), 1994, pp. 311-323.		
		Toga et al., "Registration Revisited," <u>Journal of Neuroscience Methods</u> , 48 (1993), pp. 1-13.		
		Sheng et al., "Experiments on Pattern Recognition Using Invariant Fourier-Mellin Descriptors," <u>Journal of Optical Society of America</u> , Vol. 3, No. 6, June, 1986, pp. 771-776.		
		Barlett, et al., "An Overview of HighWater FBI Technology," Posted on Internet 3/22/96, 12 pages.		
		Kurak et al., "A Cautionary Note On Image Downgrading," 1992 IEEE, pp. 153-159.		
		Wagner, "Fingerprinting," 1983 IEEE, pp. 18-22.		
		Sandford II, et al., "The Data Embedding Method," SPIE Vol. 2615, October 23, 1995, pp. 226-259.		
		Brassil et al., "Hiding Information in Document Images," November, 1995, 7 pages.		
		Pitas et al., "Applying Signatures on Digital Images," IEEE Workshop on Nonlinear Image and Signal Processing, Neos Marmaras, Greece, pp. 460-463, June, 1995.		
EXAMINER:			DATE:	
<small>*Examiner: Initial if considered, whether or not in conformance with MPEP 60; draw line through cite if not in conformance and not considered. Send copy.</small>				





INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Docket: 4830-45053	Ser: 08/649,419
			Applicant: Geoffrey B. Rhoads	
			Filed: 5/16/96	Group: 2317
OTHER DOCUMENTS				
		Bors et al., "Embedding Parametric Digital Signatures in Images," EUSIPCO-96, Trieste, Italy, accepted for publication, September 1996 (Published on internet April 9, 1996, (http://poseidon.csd.auth.gr/papers/confers.1_ind.html)), 4 pages.		
		Nikolaidis et al., "Copyright Protection of Images Using Robust Digital Signatures," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP-96), accepted for publication, May 1996 (Published on internet April 9, 1996,		
		Pitas, "A Method for Signature Casting on Digital Images," 1996 IEEE International Conference on Image Processing (ICIP'96), Lausanne, Switzerland, accepted for publication, 16-19 September 1996 (Published on internet April 9, 1996, (http://poseidon.csd.auth.gr/papers/confers.1_ind.html)), 4 pages.		
		Voyatzis, et al., "Chaotic Mixing of Digital Images and Applications to Watermarking, European Conference on Multimedia Applications, Services and Techniques (ECMAST'96), Louvain-la-Neuve, Belgium, accepted for publication, May 1996 (Published on internet April 9, 1996, (http://poseidon.csd.auth.gr/papers/confers.1_ind.html)), 8 pages.		
		Koch et al., "Digital Copyright Labeling: Providing Evidence of Misuse and Tracking Unauthorized Distribution of Copyrighted Materials," OASIS Magazine, December 1995, 3 pages.		
		Rindfrey, "Towards an Equitable System for Access Control and Copyright Protection in Broadcast Image Services: The Eqicrypt Approach," <i>Intellectual Property Rights and New Technologies</i> , Proc. of the Conference, R. Oldenbourg Verlag Wien München 1995, 12 pages.		
		Boney et al., "Digital Watermarks for Audio Signals," Proceedings of MULTIMEDIA '96, 1996 IEEE, pp. 473-480.		
		Boucqueau et al., "Equitable Conditional Access and Copyright Protection for Image Based on Trusted Third Parties, <i>Teleservices & Multimedia Communications, 2nd Int. Cost 237 Workshop</i> , Second International COST 237 Workshop, November, 1995; published 1996, pp. 229-243.		
		Delaille et al., "Digital Watermarking," Proc. SPIE - Int. Soc. Opt. Eng., vol. 2659, pp. 99-110, 1996.		
		Dautzenberg, "Watermarking Images," Department of Microelectronics and Electrical Engineering, Trinity College Dublin, 47 pages, October 1994.		
		van Schyndel et al., "Towards a Robust Digital Watermark," ACCV '95, vol. 2, December, 1995, pp. 504-508		
		Lesk, "Digital Libraries Meet Electronic Commerce: On-Screen Intellectual Property," Proceedings of the Third Forum on Research and Technology Advances in Digital Libraries - ADL - '96 - (Cat. No. 96TB100053), 1996, pp. 58-64.		
EXAMINER:			DATE:	
*Examiner: Initial if considered, whether or not in conformance with MPEP 60; draw line through cite if not in conformance and not considered. Send copy.				



INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Docket: 4830-45053	Ser: 08/649,419
			Applicant: Geoffrey B. Rhoads	
			Filed: 5/16/96	Group: 2317
OTHER DOCUMENTS				
			Chudy, "Handcuff Digital Thieves," Byte Magazine, April, 1996, 4 pages.	
			New Product Information, "FBI at AppleExpo" (Olympia, London), November, 1995, 2 pages.	
			ORuanaidh et al., "Watermarking Digital Images for Copyright Protection," http://www.kalman.mee.tcd.ie/people/jjr/eva_pap.html , February 2, 1996, 8 pages.	
			DICE Digital Watermark System, Q&A, December, 1995, 12 pages.	
			Ohnishi et al., "Embedding a Seal into a Picture Under Orthogonal Wavelet Transform, Proceedings of MULTIMEDIA '96, 1996, IEEE, pp. 514-521.	
			Arazi, et al., "Intuition, Perception, and Secure Communication," IEEE Transactions on Systems, Man, and Cybernetics, Vol. 19, No. 5, September/October 1989, pp. 1016-1020	
			Bruyndonckx et al., "Spatial Method for Copyright Labeling of Digital Images," 1994, 6 pages.	
			Craver et al., "Can Invisible Watermarks Resolve Rightful Ownerships?" IBM Technical Report RC 20509, July 25, 1996, pp 1-21.	
			"Watermarking & Digital Signature: Protect Your Work!" Published on Internet 1996, http://ltswww.epfl.ch/~jordan/watermarking.html	
			Gabor, et al., "Theory of Communication," J. Inst. Elect. Eng. 93, 1946, pp. 429-441.	
			Bruyndonckx et al., "Neural Network Post-Processing of Coded Images Using Perceptual Masking, 1994, 3 pages.	
			Pirkholtz et al., "Theory of Spread-Spectrum Communications - A Tutorial," Transactions on Communications, Vol. COM-30, No. 5, May, 1982, pp. 855-884.	
			Sklar, "A Structured Overview of Digital Communications - a Tutorial Review - Part I," IEEE Communications Magazine, August, 1983, pp. 1-17.	
			Sklar, "A Structured Overview of Digital Communications - a Tutorial Review - Part II," IEEE Communications Magazine, October, 1983, pp. 6-21.	
EXAMINER:			DATE:	
<p>*Examiner: Initial if considered, whether or not in conformance with MPEP 60; draw line through cite if not in conformance and not considered. Send copy.</p>				

INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Docket: 4830-45053	Ser: 08/649,419
			Applicant: Geoffrey B. Rhoads	
			Filed: 5/16/96	Group: 2317
OTHER DOCUMENTS				
			Tirkel et al., "A Two-Dimensional Digital Watermark," 1995, 6 pages.	
			Delaglio et al., "A Psychovisual Approach for Digital Picture Watermarking," 1995, 20 pages.	
			Fimmerstad, "The Virtual Art Museum," Ericsson Connexion, December, 1995, pp. 29-31.	
			Brandt et al., "Representations that Uniquely Characterize Images Modulo Translation, Rotation, and Scaling," Pattern Recognition Letters, August 1, 1996, pp. 1001-1015.	
			Mintzer et al., "Toward on-line, Worldwide Access to Vatican Library Materials," IBM J. Res. Develop. Vol. 40 No 2, March, 1996, pp. 139-162.	
			Hartung et al., "Digital Watermarking of Raw and Compressed Video," 1996, 9 pages.	
			Cox et al., "A Secure, Imperceptible Yet Perceptually Salient, Spread Spectrum Watermark for Multimedia," IEEE, Southcon/96, Conference Record, Pp. 192-197, 1996.	
			Caronni, "Assuring Ownership Rights for Digital Images," Published in the Proceedings of 'Reliable IT Systems,' VIS '95, HH. Brüggemann and W. Gerhardt-Häckl (Ed.), Vieweg Publishing Company, Germany, 1995, 6/14/94, 10 pages.	
			Tirkel et al., "Electronic Water Mark," DICTA-93, Macquarie University, Sydney, Australia, December, 1993, pp. 666-673.	
			Koch et al., "Copyright Protection for Multimedia Data," Proc. of the International Conference on Digital Media and Electronic Publishing, December 6-8, 1994, Leeds, U.K., 15 pages.	
			Cox et al., "Secure Spread Spectrum Watermarking for Multimedia," NEC Research Institute Technical Report, 12/5/95, 33 pages	
			Voyatzis et al., "Applications of Total Automorphisms in Image Watermarking," 1996 IEEE International Conference on Image Processing (ICIP'96), Lausanne, Switzerland, accepted for publication, 16-19 September 1996 (Published on internet April 9, 1996, (http://poseidon.csd.auth.gr/papers/confers_1.ind.html)), 4 pages, 1996 IEEE, September 16-19, 1996, Lausanne, Switzerland, pp. 237-239.	
EXAMINER:			DATE:	



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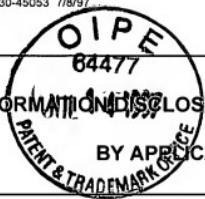
U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
		5,613,004	3/18/97	Cooperman et al.			6/7/95
		5,587,743	6/11/96	Montgomery			4/8/94
		5,579,124	11/26/96	Aijala et al.			2/28/95
		5,576,532	11/19/95	Hecht			1/3/95
		5,572,247	11/5/96	Montgomery			4/8/94
		5,572,010	11/5/96	Petrie			1/3/95
		5,559,559	9/24/96	Jungo et al.			6/14/93
		5,557,333	9/17/96	Jungo et al.			2/24/94
		5,539,735	7/23/96	Moskowitz			12/28/94
		5,539,471	7/23/96	Myhrvold et al.			5/3/94
		5,461,426	10/24/95	Limberg et al.			
		5,428,606	6/27/95	Moskowitz			
		5,404,160	4/4/95	Schober et al.			
		5,387,941	2/7/95	Montgomery et al.			
		5,327,237	7/5/94	Gerdes et al.			
EXAMINER:				DATE:			

*Examiner: Initial if considered, whether or not in conformance with MPEP 60;
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				Applicant: Geoffrey B. Rhoads			
				Filed: 5/16/96		Group: 2616	
U.S. PATENT DOCUMENTS							
Init.*		Number	Date	Name	Class	Sub	Filed
		5,075,773	12/24/91	Pullen et al.			
		4,920,503	4/24/90	Cook			
		4,855,827	8/8/89	Best			
		4,639,779	1/27/87	Greenberg			
FOREIGN PATENT DOCUMENTS							
		Number	Date	Country	Class	Sub	
		649 074 A1	4/19/95	EPC			
		605 208 A2	7/6/94	EPC			
OTHER DOCUMENTS							
		Szepanski, "A Signal Theoretic Method for Creating Forgery-Proof Documents for Automatic Verification," Proceedings 1979 Carnahan Conference on Crime Countermeasures, May 16, 1979, pp. 101-109					
EXAMINER:				DATE:			

#11

		Docket: 4830-45053	Ser: 08/649,419
		Applicant: Geoffrey B. Rhoads	
		Filed: 5/16/96	Group: 2616

U.S. PATENT DOCUMENTS

Init.*	Number	Date	Name	Class	Sub	Filed
	5,617,148	4/1/97	Montgomery		3/31/95	
	5,614,940	3/25/97	Cobbley et al.		10/21/94	
	5,606,609	2/25/97	Houser et al.			9/19/94
	5,568,179	10/22/96	Diehl et al.			5/19/93
	5,541,662	7/30/96	Adams et al.			9/30/94
	5,530,852	6/25/96	Meske, Jr., et al.			
	5,481,294	1/2/96	Thomas et al.			10/27/93
	5,450,122	9/12/95	Keene			
	5,432,542	7/11/95	Thibadeau et al.			
	5,425,100	6/13/95	Thomas et al.			
	5,418,853	5/23/95	Kanota et al.			
	5,258,998	11/2/93	Koide			
	5,247,364	9/21/93	Banker et al.			
	5,086,469	2/4/92	Gupta et al.			
	5,077,608	12/31/91	Dubner			
	4,885,632	12/5/89	Mabey et al.			
	4,647,974	3/3/87	Butler et al.			

EXAMINER: DATE:

*Examiner: Initial if considered, whether or not in conformance with MPEP 60;
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			Filed: 5/16/96	Group: 2616		

U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
		4,380,027	4/12/83	Leventer et al.			
		4,367,488	1/4/83	Leventer et al.			
		4,025,851	5/24/77	Haselwood et al.			
		3,982,064	9/21/76	Barnaby			
		3,585,290	6/15/71	Sanford			
		3,493,674	2/3/70	Houghton			

FOREIGN PATENT DOCUMENTS

		Number	Date	Country	Class	Sub	

OTHER DOCUMENTS

EXAMINER: _____ DATE: _____

*Examiner: Initial if considered, whether or not in conformance with MPEP 60;
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